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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,857	01/30/2002	Takahiro Kato	041465-5134	3634

9629 7590 06/19/2003

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EXAMINER

NGUYEN, DZUNG C

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 06/19/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/058,857

Applicant(s)

KATO ET AL.

Examiner

Dzung C Nguyen

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-13 are presented for examination.

#### *Claim Rejections - 35 U.S.C. § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

3. Claims 1-4 and 7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Uchara, US patent (6,046,974).

Regarding claim 1, Uchara teaches a supporting mechanism [10, fig 1] for movably supporting a member [11] to be supported along a supporting shaft [12 or 15], comprising: a plurality of supporting members [13 and 14] provided on the member [11] to be supported, each of said supporting members contacting with the supporting shaft [13 and 14] on at least two contact points [contact points, first point is between 24 and 15a, and second point is between 25 and 15a, fig 5 ] so as to be movable on the supporting shaft [15], the at least two contact points being apart from each other; and a pressing device [21] for pressing the plurality of supporting members against the

supporting shaft [15] so that the contact points of each supporting member simultaneously come into contact with the supporting shaft [15] (see figs 1 and 5).

Regarding claim 2, Uchara teaches wherein the supporting member [13 or 14, fig 9] has two contact surfaces [surfaces of 24 and 25, fig 5], which include the contact points, respectively and are in parallel with the supporting shaft, and the pressing device [21] comes into contact with the supporting shaft [15] at a position existing between the supporting members [13 and 14] in a parallel direction with the supporting shaft to press the supporting shaft (see fig 5).

Regarding claims 3-4, Uchara teaches wherein the supporting shaft [15] has an outer circumferential surface [15a] on which a threaded portion is formed to move the member to be supported [fig 8], and the pressing device [21] is fixed to the member to be supported and includes a rack gear [fig 4] engaging with the threaded portion so as to move the member along the supporting shaft [15] (see fig 4-5).

Regarding claim 7, Uchara teaches wherein the at least two contact points members contacting with the supporting shaft [13 and 14] on at least two contact points [contact points, first point is between 24 and 15a, and second point is between 25 and 15a, fig 5 ] are apart from each other in a circumferential direction of the supporting shaft [15] (see fig 5).

Regarding claim 8, Uchara teaches a feeding unit [fig 1] comprising: a supporting mechanism [10, fig 1] for movably supporting a member [11] to be supported along a

supporting shaft [15], comprising: a plurality of supporting members [13 and 14] provided on the member [11], each of said supporting members contacting with the supporting shaft [15] on at least two contact points [contact points, first point is between 24 and 15a, and second point is between 25 and 15a, fig 5 ] so as to be movable on the supporting shaft [15], the at least two contact points being apart from each other, said supporting shaft having an outer circumferential surface [15a] on which a threaded portion is formed to move the member to be supported (see fig 8); and a pressing device [23] for pressing the plurality of supporting members against the supporting shaft [15] so that the contact points of each supporting member simultaneously come into contact with the supporting shaft [15] and the plurality of supporting members [13 and 14] simultaneously come into contact with the supporting shaft [15], said pressing device being fixed to the member [11] to be supported and includes a rack gear [21] engaging with the threaded portion so as to move the member along the supporting shaft [15]; and a rotation device [16] for rotating the threaded portion engaging with the rack gear [21], thereby moving the member to be supported along the supporting shaft [15] (see figs 1 and 5 and 8).

Regarding claim 9, it is rejected as the same reasons set forth in claim 2 above.

Regarding claim 10, it is rejected as the same reasons set forth in claim 7 above.

*Claim Rejections - 35 U.S.C. § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-6 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchara, US patent (6,046,974) in view of Kim US patent (5,889,755).

Regarding claim 11, Uchara teaches a feeding unit [fig 1] comprising: a supporting mechanism [10, fig 1] for movably supporting a member [11] to be supported along a supporting shaft [15], comprising: a plurality of supporting members [13 and 14] provided on the member [11], each of said supporting members contacting with the supporting shaft [15] on at least two contact points [contact points, first point is between 24 and 15a, and second point is between 25 and 15a, fig 5 ] so as to be movable on the supporting shaft [15], the at least two contact points being apart from each other, said supporting shaft having an outer circumferential surface [15a] on which a threaded portion is formed to move the member to be supported (see fig 8); and a pressing device [23] for pressing the plurality of supporting members against the supporting shaft [15] so that the contact points of each supporting member simultaneously come into contact with the supporting shaft [15] and the plurality of supporting members [13 and 14] simultaneously come into contact with the supporting shaft [15], said pressing device

being fixed to the member [11] to be supported and includes a rack gear [21] engaging with the threaded portion so as to move the member along the supporting shaft [15]; and a rotation device [16] for rotating the threaded portion engaging with the rack gear [21], thereby moving the member to be supported along the supporting shaft [15] (see figs 1 and 5 and 8).

Regarding claims 5-6, and 11, Uchara does not teach a feeding shaft and its details and wherein the pressing device is fixed to the member to be supported and includes a rack gear engaging with the threaded portion so as to move.

Kim teaches an optical disk player comprising a feeding shaft [8, fig 2] being disposed in parallel with the supporting shaft [3] having an outer circumferential surface on which a threaded portion is formed to move the member to be supported (see fig 2), wherein the pressing device [press member above 8, fig 2] is fixed to the member to be supported and includes a rack gear engaging with the threaded portion so as to move (see fig 2).

It would have been obvious to one of ordinary skill in the optical pick up device art at the time the invention was made to have modified the optical pick up transport mechanism of Uchara to include a feeding shaft and the pressing device which is fixed to the member to be supported and includes a rack gear engaging with the threaded portion so as to move as taught by Kim because the modification would have improved the

precision for moving the optical pickup on the surface of the disk (see Kim col. 1 lines 50-52).

Regarding claims 12-13, they are rejected as the same reason set forth in claims 2 and 7 above.

*The prior art made of record and not relied upon*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - a. Ikegane, US. Patent (5,761,183).
  - b. Ikedo et al, US patent (6,356,525).
  - c. Takamatsu et al, US patent (5,063,557).
  - d. MOgamiga, US patent (5,243,591).
  - e. Takizawa et al, US patent (5,995,479).
  - f. Watanabe et al, US patent (5,933,407).
  - g. Tsai, US patent (5,982,735).
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung Nguyen whose telephone number is (703) 305-9695. The examiner can normally be reached on Monday-Friday from 8:30 am to 6:00 pm.



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900 and fax number is (703) 872-9314.

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6/11/03

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